

CLAIMS

1. Transdermal pharmaceutical preparation for the treatment of Parkinson's disease, characterised in that it contains a combination of at least two active substances selected from the following groups of active substances:

- a) dopamine agonists and L-dopa,
- b) monoamine oxidase inhibitors,
- c) anticholinergics,
- d) NMDA-receptor antagonists,
- e) sympathomimetics,

at least two of the said active substances being members of different active substance groups.

2. Pharmaceutical preparation according to claim 1, characterised in that the group of dopamine agonists comprises lisuride, bromocriptine, pramipexol, ropinirole, rotigotine, terguride, carbergoline, apomorphine, piribedile, pergolide and 4-propyl-9-hydroxynaphthoxazine (PHNO)

3. Pharmaceutical preparation according to claim 1 or 2, characterised in that the group of monoamine oxidase inhibitors consists of monoamine oxidase B-selective inhibitors, with selegiline being particularly preferred.

4. Pharmaceutical preparation according to claims 1 to 3, characterised in that the group of anticholinergics comprises the following active substances: biperiden, trihexyphenidyl, procyclidine, bornaprine, metixene, orphenadrine, scopolamine, atropine and other belladonna alkaloids, benzatropine and nicotine.

5. Pharmaceutical preparation according to any one of the preceding claims, characterised in that the group of the

NMDA receptor antagonists comprises memantine and amantadine.

6. Pharmaceutical preparation according to any one of the preceding claims, characterised in that the group of sympathomimetics comprises active substances from the group of the phenylethylamine derivatives, 3,4-methylenedioxymethamphetamine being particularly preferred.

7. Pharmaceutical preparation according to any one of the preceding claims, characterised in that it contains either

a) at least one active substance from the group of the monoamine oxidase B inhibitors, preferably selegiline, in combination with at least one active substance from the group of the dopamine agonists,

or

b) at least one active substance from the group of the monoamine oxidase B inhibitors, preferably selegiline, in combination with L-dopa,

or

c) at least one active substance from the group of the monoamine oxidase B inhibitors, preferably selegiline, in combination with at least one active substance from the group of the dopamine agonists and in combination with L-dopa.

8. Pharmaceutical preparation according to any one of the preceding claims, characterised in that it contains a combination of two active substances, preferably,

a) a combination of a dopamine agonist and a monoamine oxidase B inhibitor, particularly selegiline, or

b) a combination of L-dopa and a monoamine oxidase B inhibitor, particularly selegiline, or

c) a combination of a dopamine agonist and an anticholinergically active substance, or

- d) a combination of L-dopa and an anticholinergically active substance, or
 - e) a combination of a dopamine agonist and an NMDA receptor antagonist, or
 - f) a combination of L-dopa and an NMDA receptor antagonist
9. Pharmaceutical preparation according to any one of the preceding claims, characterised in that it contains a combination of three active substances, preferably
- a) a combination of a dopamine agonist or L-dopa, an anticholinergically active substance, and an NMDA receptor antagonist,
- or
- b) a combination of a dopamine agonist or L-dopa, an anticholinergically active substance, and a monoamine oxidase B inhibitor, particularly selegiline.
10. Pharmaceutical preparation according to any one of the preceding claims, characterised in that it contains a combination of selegiline with a dopamine agonist from the group comprising ropinirole, pramipexol and rotigotin, the combination of selegiline and rotigotin being particularly preferred.
11. Pharmaceutical preparation according to any one of the preceding claims, characterised in that it additionally contains at least one further active substance selected from the group comprising catechol-O-methyl transferase inhibitors and decarboxylase inhibitors, with entacapone, benserazide and carbidopa being particularly preferred.
12. Pharmaceutical preparation according to any one of the preceding claims, characterised in that it addition-

ally contains at least one active substance from the group of the beta blockers, preferably from the group comprising propranolol, timolol, pindolol and atenolol.

13. Pharmaceutical preparation according to any one of the preceding claims, characterised in that it is present as a transdermal therapeutic system, preferably in the form of an active substance patch adhering to the skin.
14. Pharmaceutical preparation according to any one of the preceding claims, characterised in that the said at least two active substances are contained in different layers or compartments of the transdermal therapeutic system.
15. Pharmaceutical preparation according to any one of the preceding claims, characterised in that it is produced by laminating at least two layers, each of which containing at least one active substance, wherein to prepare a first layer, a readily volatile active substance or a readily volatile adjuvant is used as the solvent for the matrix base material, and wherein said layer is laminated to a second layer which has been prepared without the use of a readily volatile active substance or readily volatile adjuvant, and wherein due to the diffusive migration of the readily volatile active substance or readily volatile adjuvant into the said second layer, a shear-stable composite and a matrix of uniform appearance is obtained.
16. Use of the active substance combination as defined in claims 1 to 12, for the manufacture of a transdermally administrable medicament for treating Parkinson's disease.

17. Use according to claim 16, characterised in that said medicament is formulated as a transdermal therapeutic system.
18. Process for the therapeutic treatment of a person suffering from Parkinson's disease, wherein an active substance combination as defined in claims 1 to 12 is administered to said person via the transdermal route.
19. Process according to claim 18, characterised in that administration of the active substance combination is accomplished by means of a transdermal therapeutic system containing said combination.
20. Process according to claim 18, characterised in that administration of the active substance combination is accomplished by means of two or more transdermal therapeutic systems, each of which containing at least one active substance of the active substance combination.